

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)



Applicant's or agent's file reference P350989WO/RMP	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA/416)	
International application No. PCT/GB 03/03333	International filing date (<i>day/month/year</i>) 01.08.2003	Priority date (<i>day/month/year</i>) 03.08.2002
International Patent Classification (IPC) or both national classification and IPC G08B25/01		
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1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 5 sheets, including this cover sheet.

☒ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

 These annexes consist of a total of 7 sheets.

3. This report contains indications relating to the following items:
 - I ☒ Basis of the opinion
 - II ☐ Priority
 - III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
 - IV ☐ Lack of unity of invention
 - V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
 - VI ☐ Certain documents cited
 - VII ☐ Certain defects in the international application
 - VIII ☐ Certain observations on the international application

Date of submission of the demand 01.03.2004	Date of completion of this report 27.09.2004
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized Officer Wright, J Telephone No. +49 89 2399-2705 

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. **PCT/GB 03/03333**

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, Pages

1-26 as originally filed

Claims, Numbers

1-34 received on 16.07.2004 with letter of 13.07.2004

Drawings, Sheets

1/1 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
☐ the language of publication of the international application (under Rule 48.3(b)).
☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority in written form.
☐ furnished subsequently to this Authority in computer readable form.
☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
☒ the claims, Nos.: 35-47
☐ the drawings, sheets:

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5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	2-25,27-34
	No: Claims	1,26
Inventive step (IS)	Yes: Claims	
	No: Claims	1-34
Industrial applicability (IA)	Yes: Claims	1-34
	No: Claims	

2. Citations and explanations

see separate sheet

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

Reference is made to the following documents:

- D1: US-B-6 398 7271 (COOPER THOMAS ET AL) 4 June 2002 (2002-06-04)
- D2: US 2001/020898 A1 (PIERCE DOUGLAS ET AL) 13 September 2001 (2001-09-13)
- D3: US-A-5 732 125 (OYAMA MITSUKAZU) 24 March 1998 (1998-03-24)
- D4: EP-A-1 216 890 (MITSUBISHI ELECTRIC CORP) 26 June 2002 (2002-06-26)
- D5: DE 200 20 942 U (SCHLOSSER JOSEF) 18 April 2002 (2002-04-18)

1. The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 1 is not new in the sense of Article 33(2) PCT.

The document D1 discloses all the features of claim 1 of the application.

D1 discloses a personal alarm system comprising (in summary form only);

a personal alarm signalling device (20) worn by the patient (D1, fig. 2 and abstract);

a user activated responder device provided locally and contacting outside help by a telephone line (see communications unit 30, radio or sire lines 52, telephone lines 460)

responder receives alarm signal, transmits response and informs user of the receipt of alarm signal, including a display for response (D1 user questions and has interface for user data , (D1, fig. 1 respiration etc. and panic button, D1, col. 12, line 9 and D1, col. 11, lines 40-52)

the transceiver means adapted to transmit user data to the repsonder after receipt of the response data (since in D1 all communication goes via communications unit 30, see fig. 1, these features are also known from D1, all responses/signals to 20 being sent via the communications unit 30).

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Since there is no difference between claim 1 and D1, claim 1 is not new, Art. 33(1,2) PCT.

2. Claim 26

Method claim 26 corresponds to device claim 1. For the reasons given above, the method claim is likewise not new, Art. 33(1,2) PCT.

3. Claims 2-25,27-34 appear not to comprise any subject matter which involves an inventive step in the light of the available prior art D1 to D5.

It is in particular noted that D3 discloses a device which is worn by the user and establishes video and audio communication with the user, see abstract and fig. 1. The skilled person would include this advantageous feature in D1 without making an inventive step. Channel selection optimisation is disclosed in D2, col. 2, lines 13-30. D3 also discloses aspects of a subject moving out of a particular range. The person skilled in the art would modify the device of D1 in order to include the advantageous range monitoring of D3 and in so doing would arrive at this subject matter.

D4 discloses an emergency device having a door opening feature. The skilled person would include this advantageous feature in D1 without having made an inventive step, see D4, col. 5, lines 26-50.

D5 discloses aspects of position location which are generally known and which the skilled person would include in D1 without having made an inventive step.

DT05 Rec'd PCT/PTO 0-2 FEB 2005

CLAIMS

1 A personal alarm system comprising:

5 a personal alarm signalling device adapted to be worn on a user's body comprising a user activatable transceiver means for transmission of an alarm signal, and

10 a user activatable responder device adapted to contact outside help via a telephone network in response to the alarm signal, the responder device being provided locally in the vicinity of the user to thereby reduce the power required for the alarm signalling device to contact the responder device,

15 the responder device being adapted to receive the alarm signal and to transmit a response signal to the transceiver after receipt of the alarm signal to inform the user of the receipt of the alarm signal,

the alarm signalling device comprising means for displaying the response signal to the user and interface means for receiving user data,

20 the transceiver means being adapted to transmit the user data to the responder device after receipt of the response signal and to receive responder data from the responder device, the interface means being adapted to provide the responder data to the user.

25

2 An alarm system according to claim 1 characterised in that the interface means comprises a sound receiving member and a sound producing member to provide two way communication via the alarm signalling device.

30

3 An alarm system according to claim 1 or 2 characterised in that the user data and/or responder data are sound or audio data.

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4 An alarm system according to claim 3, characterised

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in that the interface means comprises the user display means.

5 An alarm system according to claim 3 or 4,
5 characterised in that the user display means is adapted to display the responder data.

6 An alarm system according to any of the preceding
claims, characterised in that the user data comprise the
10 user's voice and/or data relating to the user's physical condition.

7 An alarm system according to any of preceding
claims, characterised in that the transceiver means
15 comprises signal channel selection means for selecting a frequency or channel at which the transceiver means transmits the alarm signal.

8 An alarm system according to claim 7, characterised
20 in that the responder device comprises responder channel selection means for selecting the channel for receiving the alarm signal.

9 An alarm system according to claim 7 or 8,
25 characterised in that the responder device is adapted to transmit a selection signal for controlling the signal channel selection means, the transceiver means being adapted to receive a selection signal from the responder device for controlling the signal channel selection means.

30

10 An alarm system according to claim 9, characterised
in that the responder device is adapted to control the
signal channel selection means in response to a reduced
signal quality on the selected channel.

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11 An alarm system according to any of claims 8 to 10,
characterised in that the responder channel selection means
continuously or periodically transmits a channel monitoring
signal for monitoring the quality of the transmissions
5 channel or frequency.

12 An alarm system according to any of the preceding
claims, characterised in that the user display means
comprises a visual display member and/or an audible display
10 member and/or a tactile display member.

13 An alarm system according to any of the preceding
claims, characterised in that the device comprises a range
monitoring means for monitoring the range between the alarm
15 signalling device and the responder device.

14 An alarm system according to claim 13, characterised
in that the range monitoring means are adapted to activate
the user display means if the signalling device is out of
20 the range of the responder device.

15 An alarm system according to claim 14, characterised
in that the range monitoring means are activatable by the
user.
25

16 An alarm system according to any of the preceding
claims, characterised in that the transceiver means is
adapted to transmit an identification code to identify the
alarm signalling device from multiple alarm signalling
30 devices.

17 An alarm system according to any of the preceding
claims, characterised in that the alarm signalling device
is adapted to remotely operate devices such as doors and
35 appliances.

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18 An alarm system according to any of the preceding claims, characterised in that the responder device is adapted to contact outside help such as aid services.

5 19 An alarm system according to claim 18, characterised in that the responder device comprises means for signalling an alarm such as a visual alarm and/or audible alarm.

20 An alarm system according to claim 19, characterised
10 in that the alarm signalling means comprises telephone dialling means for contacting outside help such as emergency services and/or telephone services.

21 An alarm system according to any of the preceding
15 claims, characterised in that the responder device is connected to the telephone network.

22 An alarm system according to any of the preceding
claims, characterised in that the responder device
20 comprises telephone answering means for enabling the user to answer calls via the alarm signalling device.

23 An alarm system according to any of claims 16 to
22, characterised in that the system comprises one or more
25 responder devices and one or more alarm signalling devices, the responder device signalling an alarm signal which corresponds to the identified signalling device.

24 An alarm system according to claim 23,
30 characterised in that the system comprises an alarm procedure storage means for storing alarm procedures for each alarm signalling device, the alarm signalling means signalling an alarm in accordance with the alarm procedure for the identified alarm signalling device.

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25 An alarm system according to any of the preceding claims wherein the system may comprise means for locating the position of the alarm signalling device.

5 26 A method of receiving an alarm signal from a user comprising providing

 a personal alarm system comprising:

 a personal alarm signalling device adapted to be worn on a user's body comprising a user activatable
10 transceiver means for transmission of an alarm signal; and

 a user activatable responder device adapted to contact outside help via a telephone network in response to the alarm signal, the responder device being provided locally in the vicinity of the user to thereby reduce the
15 power required for the alarm signalling device to contact the responder device,

 the responder device being adapted to receive the alarm signal and to transmit a response signal to the transceiver after receipt of the alarm signal,

20 the alarm signalling device comprising means for displaying the response signal to the user and interface means for receiving user data,

 the transceiver means being adapted to transmit the user data to the responder device after receipt of the response signal and to receive responder data from the
25 responder device, the interface means being adapted to provide the responder data to the user

 the method comprising:

 activating the alarm signalling device,

30 the responder device receiving the alarm signal and transmitting a response signal after receipt of the alarm signal,

 displaying the response signal to the user,

 transmitting the user data to the responder device
35 after receipt of the response signal and receiving

responder data from the responder device, and
providing the responder data to the user.

27 A method according to claim 26, characterised in
5 that the responder device is adapted to contact outside
help directly such as aid services.

29 A method according to any of claims 26 to 27,
characterised in that the user data comprise voice data
10 and/or user health data.

30 A method according to any of claims 26 to 29,
characterised in that the responder means comprises
dialling means for dialling emergency services.
15

31 A method according to claim 30, characterised in that
the dialling means are adapted to continue dialling until
an emergency service is contacted.

20 32 A method according to any of claims 26 to 31,
characterised in that the user communicates with the
emergency services via the interface means.

33 A method according to any of claims 26 to 32,
25 characterised in that the transceiver means comprise signal
channel selecting means for selecting the frequency or
channel for transmitting the alarm signal, and the
responder device comprises responder channel selection
means for selecting the channel for receiving the alarm
30 signal, the responder device controlling the signal channel
selection means in response to a reduced signal quality
and/or interference on the selected channel, the method
comprising the step of selecting a different channel if the
transmission quality is reduced.
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34 A method according to any of claims 26 to 33,
characterised in that the responder device continuously or
periodically transmits a selection signal to monitor the
transmission quality of the transmission channel or
5 transmission frequency.